GOVERNMENT OF INDIA
WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION
LOK SABHA

UNSTARRED QUESTION NO:4711
ANSWERED ON:30.03.2017
Assessment of Rainwater Harvesting Capacity
Karandlaje Km. Shobha

Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION be pleased to state:

(a) whether the Government has made any assessment of rainwater harvesting capacity, existing structures and quality of water harvested in various cities of the country and if so, the details thereof;

(b) whether each State has proposed different rules for rainwater harvesting in structures where roof top sizes range from 100 sq. mts. to 300 sq. mts.; and

(c) if so, the details thereof and the manner in which the Government proposes to measure effectiveness of such rules for different States?

Answer

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION
(DR. SANJEEV KUMAR BALYAN)
(a) Water being a State subject, database on artificial recharge is not maintained centrally.

(b) & (c) Central Ground Water Authority (CGWA) and Ministry of WR, RD & GR has issued advisories to all States/ Union Territories and Ministry of Urban Development to take necessary action to adopt rainwater harvesting/artificial recharge. So far, 30 States/UTs have made roof top rain water harvesting mandatory by enacting laws or by formulating rules & regulations or by including provisions in building bye-laws or through suitable Government Orders. Details are given at Annexure. Water being a State subject, it is State Governments' responsibility to ensure that the rules are effectively implemented.

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ANNEXURE
Annexure referred in reply to Lok Sabha Unstarred Question No. 4711 to be answered on 30.03.2017 regarding "Assessment of Rainwater Harvesting Capacity"
Details of State/UT-wise Status of Mandatory Rainwater Harvesting in buildings
S.No. State Status
1 . Andhra Pradesh â€¢ Under Chapter 3, Section 17(1) of the 'Andhra Pradesh Water, Land and Tree Act, 2002' stipulates mandatory provision to construct rainwater harvesting structures at new and existing constructions for all residential, commercial and other premises and open space having area of not less than 200 sq. m. in the stipulated period, failing which the authority may get such rain water harvesting structures constructed and recover the cost incurred along with the penalty as may be prescribed. Municipal Administration and Urban Development have notified that all Group Housing Schemes shall be provided with required facilities and infrastructure for conservation and harvesting of rain water.
â€¢ Municipal Administration and Urban Development Department vide G.O. No. 185 dated May 5, 2001 have been assigned responsibilities and made special efforts to conserve rain water through rain water harvesting structures in urban environs.
â€¢ Municipal Corporation of Hyderabad, surrounding Municipalities and Panchayats have been made responsible for construction of rain water harvesting pits.
2. Arunachal Pradesh Roof Top Rain Water Harvesting made mandatory.
3. Assam Roof Top Rain Water Harvesting made mandatory.
4 . Bihar â€¢ Enacted "The Bihar Ground Water (Regulation and Control of Development and Management) Act, 2006. Chapter-III (Clause 18) of the Act stipulates provision of roof top rain water harvesting structures in the building plan in an area of 1000 sq. mt. or more while according approval for construction by the Municipal Corporation / other local bodies.
â€¢ To encourage rainwater harvesting, necessary provisions are under consideration in the proposed building bye laws and development code of Bihar Municipal Property tax (Assessment Collection and Recovery) Rule 2012.
5. Chhattisgarh Rainwater harvesting has not been made mandatory. However, The Nagar Palika Nigam has made it mandatory to adopt the roof top rain water harvesting in the new buildings having roof top area more than 500 sq ft. The Chhattisgarh draft ground water regulation and control of development and management bill has been prepared wherein the rainwater harvesting and artificial recharge to ground water is proposed to consider as mandatory.
6. Delhi â€¢ Roof top rain water harvesting made mandatory for building having area of 100 sq. m. and above by amending building bye laws.
â€¢ Financial assistance of 50% of the cost uptoRs. 1 lakh is provided under Bhagidari programme to Group Housing Societies. Resident Welfare Association, private/ recognized schools, institutional buildings, hospitals, charitable institutions for construction of rain water harvesting structures.
â€¢ Registrar, cooperative Societies advised all Group Housing Societies to adopt rain water harvesting in their premises.
â€¢ MOU signed with Confederation of Indian Industries (CII) for promotion of water conservation, water audit of Govt. buildings and

industries.
â€¢ Requested all Government departments to adopt rain water harvesting and waste water recycling system.
â€¢ Education Department is implementing rain water harvesting in all schools under their control.
â€¢ NDMC, MCD, DDA, PWD sanctioning plan by including rain water harvesting in their buildings.
7. Goa Government of Goa has issued notification for making roof top rainwater harvesting mandatory. However, the same becomes operative after necessary amendments are made in the Town & Country Planning and Municipal Acts.
8. Gujarat â€¢ The Urban development and Urban Housing Department, GoGvide Order No.-PRC/102000/1437/L dated 29.04.2000 and subsequent orders No.-PRC/102004/11961/L dated 27.07.2004 and No.-PRC/102004/1961/L (part) dated 24.11.2008 has issued order that all the Municipal Corporation areas/Nagar Palika areas, city and Urban development areas of the State, where underground water level is 20 m or more.
â€¢ In such areas building development permission for public purposes building, and multi storied building shall be granted subject to facility of Rain water Harvesting in such building and completion certificate, building use permission shall be granted by all the Municipal Corporation as well as Urban development Authority.
9. Haryana HUDA has notified the Haryana Urban Development Authority (Erection of Buildings) Amendment-Regulations, 2001 on 31st October, 2001 whereas Urban Local Bodies Department has notified Haryana Municipal Building (Amendment) Bye-laws, 2002 on 13th December, 2002 for the purpose of adoption of Roof top rain water harvesting. HUDA and Urban Local Bodies Department have made it mandatory for all Govt. buildings and private houses in HUDA Estates as well as Municipal Areas having roof top surface area of 100 square meters or more to have a Rain Water Harvesting Structure.
10. Himachal Pradesh Installation of rain water harvesting system has been made mandatory for all buildings to be constructed in urban areas of the State and no building plan without rain water harvesting system can be approved. Construction of rain water harvesting system has also been made mandatory for all schools, Govt. buildings and Rest Houses, upcoming industries, bus stands etc,.
11. Jharkhand â€¢ Ranchi Regional Development Authority amended building bye laws in November, 2006 and made adoption of rain water harvesting and recharge well mandatory for multi dwelling and commercial units.
â€¢ In 2012 , the power to regulate building bye laws has been transferred to Ranchi Municipal Corporation (RMC). As per provisions in RMC Bye Laws clause 5.3.1(vi) (b) Rainwater harvesting system should be provided on the roof top of the building and underground water recharging system should be provided through wells /tube wells and as per and as per clause 5.3.1. (vi) (c) in all the multi-storied buildings water harvesting facilities should be provided in consultation with the department of water resources before digging the tube well.
12. Karnataka â€¢ Amended Rules of Bangalore Water Supply and Sewerage Board which provide for mandatory provision of rain water harvesting structures by every owner with site dimension of 2400 sq.ft and above, or every owner who proposes to construct new buildings with site area more than 1200 sq. ft.
â€¢ Different line departments are implementing programmes of rainwater harvesting and artificial recharge in the State.
13. Kerala â€¢ Rainwater harvesting systems in new buildings have been made mandatory as per 'Kerala Municipality Building (Amendment) Rules, 2009' As per the said rules, 'workable groundwater recharging arrangements shall be provided as an integral part of all new building constructions with total floor area above 150 sq.m and total plot area above 320 sq.m through collection of rooftop rainwater.
14. Madhya Pradesh â€¢ Roof top Rainwater Harvesting is mandatory for all types of buildings having plot size more than 140 sq.m vide Madhya Pradesh Bhumi VikasNiyam 2012, Gazette notification of MP dated 01.06.2012.
â€¢ Other orders include i) letter No. 2563 dated 27.10.2009 of Principal Secretary , Urban Development , Govt. of MP ii) order No. 15/2009 dated 26.12.2009 of principal secretary , Urban development , Govt. of MP iii) letter No. 1046/2012 dated 28.08.2012 of Commissioner , Municipal Corporation, Bhopal.
15. Maharashtra â€¢ Roof Top Rain water harvesting has been made mandatory for all layouts open spaces/housing societies and new construction/reconstructions/ additions on plots having area not less than 300 sq.m. in accordance with the Govt. Resolution No. TPB 432001/2133/CR-230/01/UD-11 dated 10/03/2005 in big cities/urban areas. As per this Act, while issuing the occupancy certificate of such buildings, it is the duty of concerned local authority to ensure that rain water harvesting system is installed.
â€¢ GoM has published the Maharashtra Groundwater (Development and Management) Act 2009 (Act No. XXVI of 2013) in the Maharashtra Government Gazette, Extraordinary, Part IV, dated 3rd December 2013. The Act came in force on 1st June 2014. As per the Act mandatory provisions have been made for rain water harvesting for artificial groundwater recharge within the city areas from notified areas for roofs greater than 100 sq m.
16. Meghalaya Roof Top Rain Water Harvesting made mandatory for buildings above 100 sq.m area.
17. Nagaland The State Government has made provision for roof top rainwater compulsory for all new Government buildings.
18. Punjab Roof Top Rain Water Harvesting has been made mandatory in all buildings above 200 sq. yds. by amending the buildings by-laws vide Chief Town Planner, Local Govt. Department, Punjab vide Notification No.10/19/05-2LG/803 III dated 28.12.2005. PUDA is also amending building bye-laws applicable outside the municipal limits, to make Roof Top Rain Water Harvesting mandatory in buildings constructed in area where water table is falling.
19. Rajasthan Rainwater Harvesting has been made compulsory by the Government of Rajasthan in all the Municipal Areas vide it"s Notification dated15, September,2010 "The Rajasthan Municipalities (Amendment) Act 2010"(Act. No.19 of 2010). The said Act has been published by the Law (Legistative Drafting) Department, Govt. of Rajasthan vide Notification dated 15.09.2010. As per sub section(1) and (2)of section 238 of the Act "In every, construction of RTRHS (Roof Top Rainwater Harvesting) on a plot of land exceeding 300 sq. m. in municipal area, it shall be compulsory to install rain water harvesting system. Municipality shall not grant any permission under section 194 unless the person seeking permission make provision for rainwater harvesting system of the type and specification prescribed under sub-section(1) in the map required under that section and undertakes to install such system and furnishes security for the same to satisfaction of the Municipality. A mechanism has been made under sub section 3 of section 238 of the Act that notwithstanding anything contained in section 194 or any other provision of the Act, every owner of the building, for which rain water harvesting system is compulsory under provision of this section, shall after completion of such building, obtain a completion certificate in the prescribed manner and no such building shall be occupied unless and until such certificate has been obtained.
20. Tamil Nadu Vide Ordinance No. 4 of 2003 dated July, 2003 laws relating to Municipal Corporations and Municipalities in the State have been amended making it mandatory for all the existing and new buildings to provide rain water harvesting facilities. The State has launched implementation of RWH Schemes on massive scale in Government buildings, private houses/ institutions and commercial buildings in urban & rural areas. The State Government has achieved cent per cent coverage in roof top rain water

harvesting. It has also been made mandatory to include roof top rain water harvesting structures in the plan of the building itself for accordance of approval by the relevant competent authority.
21. Telangana In accordance with the States Reorganization Act 2014 the WALTA Act enacted by Govt. of Andhra Pradesh is also adopted by the Govt. of Telangana till alternate arrangements were made.
22. Tripura As per Rule-110 of the Tripura Building Rules, 2004, water harvesting through starting of rain water runoff is mandatory in all new buildings having plinth area more than 300 sq. mtr for all types of uses and in group housing of any size.
23. Uttar Pradesh Government of Uttar Pradesh has made Roof Top rain Water Harvesting (RTRWH) mandatory in Government/ new buildings having more than 300 Sqmarea.
24. Uttarakhand The Government (AwasEvamShahariVikas) made rules for compulsory installation of rain water harvesting system and directed to adopt rules in building Bye-laws vide order dated 15.11.2003. Accordingly, all the Development Authorities have made partial amendments in the prevalent House Building and Development Bye laws/ Regulation.
25. West Bengal â€¢ Vide Gazette notification No. 67/MA/O/C-4/3R-B/2002 dated 14.02.2007, Government has promulgated 'The West Bengal Municipal (Building) Rules, 2007' and vide its rule No. 168 (13), Part − XII has made rain water harvesting mandatory for all buildings.
â€¢ Vide Gazette notification No. 450/MA/O/C-4/3R-8/2003 dated 09.09.2009, Government has promulgated 'The West Bengal Municipal (Building) Rules, 2009' and vide its rule No. 144 , Chapter − XXI, Miscellaneous has made rain water harvesting mandatory for all buildings with roof area more than 20,000 sq.m.
UTs
1. Andaman and Nicobar Islands In UT of Andaman & Nicobar Islands, rooftop rainwater harvesting has been made mandatory in Port Blair Town.
2. Chandigarh Chandigarh Administration has also made it mandatory to adopt rain water harvesting vide its Order dated October 16, 2008. As per this order all the buildings which are or will be located on plot of one Kanal and above shall have rain water harvesting system to recharge ground water installed as per the specifications given by the Administration. All the existing building shall install rain water harvesting to recharge the ground water within two years from the date of issuance of this notification.
3. Dadar, Nagar & Haveli Roof Top Rain Water Harvesting made mandatory as per in Development and Control Rules (Amendments Rules 2009) in all types of buildings, which are constructed in an area of 1000 sq.m and above.
4. Daman & Diu Daman Municipal Building Model Bye-laws and Zoning Regulation, 2002 exists which have provision for construction of sump well for recharge of ground water. The UT Administration has issued instructions to the local PWD for construction of roof top rainwater harvesting structures. Administration has also advised the local bodies such as Municipality & District Panchayats to make provision for construction of roof top rain water harvesting structures. Local bodies have already initiated action in this regard.
5. Puducherry Made provision of rain water harvesting mandatory in residential, offices and public buildings, commercial buildings, educational and health institutions and industrial buildings vide Govt. order No. 6/2010-Hg. Dated 19.3.2010.